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ABSTRACT

First in a series of fourteen instructional outlines, this document provides an overview of a fire service training program designed for use by recently formed fire departments in which firemen have had no previous formal training. (Each of the other volumes in the set contains a more complete instructional outline of one portion of the program.) Forty-two hours are suggested for the completion of the fourteen-part course, and a specific number of hours is estimated for each topic. The fourteen topics are (1) introduction, (2) fire service rope, (3) portable extinguisher, (4) forcible entry, (5) fire apparatus, (6) fire stream, (7) treating the burn victim, (8) ventilation, (9) ladder, (10) salvage and overhaul, (11) rescue, (12) protective breathing equipment, (13) liquid and compressed gas emergencies, and (14) fire fighting procedures. Except for part 14, which should be covered last, the sequence for teaching the various practices can be arranged to meet the needs of the individual department. A bibliography of references that are used as guides throughout the set is included. (Two of the titles described in this introductory document--"Fire Hose Practices" and "Course Postmortem"--are not included in the actual set; in their places are "Immediate Care of the Burn Patient" [CE 016 675] and "LP and Compressed Gas Emergencies" [CE 016 674].) (ELG)

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# FIRE SERVICE TRAINING

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## PREFACE

On the pages to follow will be found a course outline entitled "Introduction to Fire Fighting". This has been developed by the Fire Service Training Program for new fire departments, where firemen must be trained for service as quickly as possible, and for departments that have been active not more than two years and have had no formal training.

Forty-two hours have been allotted for completion of the course, and a specific number of hours has been estimated for each topic for the instructor's convenience. Sequence of topics can be arranged according to the needs established by the fire chief and the instructor with the exception of XIII and XIV which should be completed last.

No basic textbook is required for this course, however, the references which appear should be studied carefully by the instructor.

CONTENTS

I. INTRODUCTION TO THE FIRE SERVICE

II. FIRE SERVICE ROPE PRACTICES

III. PORTABLE EXTINGUISHER PRACTICES

IV. FORCIBLE ENTRY PRACTICES

V. FIRE APPARATUS PRACTICES

VI. FIRE STREAM PRACTICES

VII. FIRE HOSE PRACTICES

VIII. VENTILATION PRACTICES

IX. LADDER PRACTICES

X. SALVAGE AND OVERHAUL PRACTICES

XI. RESCUE PRACTICES

XII. PROTECTIVE BREATHING EQUIPMENT

XIII. FIRE FIGHTING PROCEDURES

XIV. COURSE POSTMORTEM

INTRODUCTION TO FIRE FIGHTING

I. *Introduction to the Fire Service (1 Hour)

A. The Fire Department

1. Purpose

2. Operation

B. The Fire Fighter

1. Characteristics

2. His job

C. Rules and Regulations

1. Department

2. Housing

3. Schedules

4. Dress

II. Fire Service Rope Practices (3 Hours)

A. Elements of a Knot

B. Types of Knots

1. Becket bend or sheet bend

2. Bowline knot

3. Clove hitch

4. Chimney hitch

5. Half hitch

III. *Portable Extinguisher Practices (3 Hours)

*National Fire Protection Association

A. Definition

B. Fire Triangle

C. New Classification of Fire Extinguishers

D. Types of Extinguishers

1. Chemical solution (soda-acid)

2. Water type

3. Foam

4. Dry chemical

5. Carbon dioxide

6. Water-expellant gas operated

IV. Forcible Entry Practices (2 Hours)

A. Definition and Conditions Requiring Forcible Entry

B. Forcible Entry Tools

C. Opening Doors

D. Opening Windows

E. Opening Roofs, Floors, Walls, and Ceilings

V. *Fire Apparatus Practices (6 Hours)

NOTE: Instructor should discuss only equipment applicable to the pump or pumps used in fire department concerned.

A. Fire Apparatus Requirements

B. Driver-operator Requirements and Responsibilities

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*References:

International Fire Service Training Manuals

1. Fire Apparatus Practices
2. Mechanical Principles of Fire Pump Operation
3. Fire Service Practices for Volunteer Fire Departments

C. Special Mechanical Features and Functional Equipment

D. Caring for Fire Apparatus

E. Operation of Pumper

VI. *Fire Stream Practices (3 Hours)

A. Fire Streams

1. Definition

2. Purpose

B. Extinguishing Properties of Water

C. Requirements for Extinguishing a Building Fire

D. Types of Fire Streams

E. Characteristics of Good Fire Streams

F. Fire Service Terms, Symbols, Etc.

G. Producing Streams From Hand Lines

1. Solid streams

2. Fog streams

H. Friction Loss Table for Small Rubber Lined Hose

I. Producing Master Streams

J. Producing Master Streams Table

VII. Fire Hose Practices (3 Hours)

A. Coupling and Nozzle Connections

B. Making Hose Rolls

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*References:

International Fire Service Training Manuals
1. Fire Stream Practices
2. Fire Service Practices for Volunteer Fire Departments

C. Loading Fire Hose

D. Hose Layouts

E. Fire Hose Carriers

F. Unloading and Advancing Fire Hose

G. Care of Fire Hose

H. Fire Hose Testing Procedures

VIII. Ventilation Practices (3 Hours)

A. Situations Requiring Ventilation

B. Top or Vertical Ventilation

C. Cross or Horizontal Ventilation

D. Water Fog as an Aid to Ventilation

IX. Ladder Practices (3 Hours)

A. Introduction to Ladders

B. How to Space and Climb Ladders

C. How to Work From a Ladder

D. Methods for Handling Ladders

E. Inspection and Care of Fire Department Ladders

X. *Salvage and Overhaul Practices (3 Hours)

A. Salvage Practices (Section One)

1. Definition of salvage

2. Responsibility of the fire department

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*References:

International Fire Service Training Association Manuals
1. Salvage and Overhaul Practices
2. Fire Service Practices for Volunteer Fire Departments

3. Value in public relations

4. Salvage equipment

5. Floor runners

6. Salvage covers

   a. Care and preparation

   b. Methods of folding

   c. Methods of spreading

7. Arranging materials to be covered

8. Removal of water from building

9. Restoring the premises

10. Testing salvage covers

B. Overhaul Practices (Section Two)

1. Definition of overhaul

2. Value of proper overhaul

3. Overhaul equipment

4. Searching for hidden fires

5. Extinguishing hidden fires

6. Determining the cause of fires

7. Evidence of arson

   a. Recognizing evidence

   b. Protecting and preserving evidence

8. Procedures for making building, contents, and area safe

9. Procedures for releasing the premises

10. Obtaining data for official report

XI. Rescue Practices (3 Hours)

NOTE: Instructor should strongly recommend that department members have first aid training especially in treatment of severe bleeding, burns, and suffocation.

A. Personal Protection

B. Rescue Techniques

C. Rescue Knots

XII. Protective Breathing Equipment (3 Hours)

A. Need for Protection

B. *Types of Breathing Equipment

1. Demand regulator

2. Oxygen generating

3. Oxygen rebreathing

4. Filter

C. Donning the Breathing Equipment

XIII. Fire Fighting Procedures (3 Hours)

A. Alarm Response and Visual Anticipation

B. Arrival and Size-up

C. Procedures for Attacking, Confining, and Extinguishing the Fire

D. Overhaul and Return to Quarters

XIV. Course Postmortem (3 Hours)

A. Summary

B. Discussion

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*Reference:

Fire Service Practices for Volunteer Fire Departments

BIBLIOGRAPHY

International Fire Service Training Association Manuals:

Fire Service Practices for Volunteer Fire Departments

Salvage and Overhaul Practices

Fire Stream Practices

Fire Apparatus Practices

Mechanical Principles of Fire Pump Operation

Fire Fighting -- Facilities, Planning, and Procedures

National Fire Protection Association Pamphlets